Health Care on Grassroot Level

an idea in its infancy

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Health Care on Grassroot Level - an idea in its infancy

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Abstract

In some of the worlds poorest countries there is a lack of safe and adequate water supply and poor health awareness. This is caused by a combination of lack of knowledge, illiteracy, superstition and deep rooted traditions within the community combined with poverty and dire living conditions. The result has been that preventable diseases like diarrhoea, common cold, dysentery etc. have become rampant. In this context very simple and less costly health programmes could make a difference. Our idea is to reach out to where people live, to the small villages and communities, and aim at changing their practice through information given in a relaxed context. Health awareness is our goal. Essential health topics targeting in particular illiterate women presented as computer programs using icons and speech recognition. Step by step drawings, and in the local language, developed in cooperation with national authorities and implemented by the National Red Cross/Red Crescent Society.

The preliminary SWOT analysis highlights: strengths, weaknesses, opportunities and threats of the programme as basis for setting up some preconditions for success. Finally are listed some of the tasks that have to be done for the continuation of the idea.

Keywords Health care, ICT technology, organisational problem

1 Introduction

It all started in Afghanistan. In the period from 1998 to August 2001 I was working for The International Federation of Red Cross and Red Crescent Societies as Head of Subdelegation in Jalalabad and Mazar I Sharif. A major part of my work was support for and monitoring of the Afghan Red Crescent Society´s 19 primary health clinics in these areas. We supported with medicine on a monthly basis, and we developed health programs targeting in particular women and children.

Afghanistan a country torn by wars since 1979 and one of the poorest countries in the world. Some statistics can illustrate the health situation.

- Child mortality 256/1000
- Maternal deaths 1800/100.000 births
- Average lifespan 42 years M/F

The child mortality rate for countries like Britain, US or Denmark is less than 10. In Afghanistan only 2 out of 3 children will experience their 5 years birthday. The maternal death rate in the US is 8 and for Denmark its 5.In Afghanistan 2/3 live for 2 $ a day or less.

Due to lack of safe and adequate water supply and poor health awareness within the community combined with poverty and dire living conditions preventable diseases like diarrhoea, common cold, dysentery etc. have become rampant.

In this context very simple and less costly health programmes could make a difference. E.g. we set up a programme with the aim to reduce pregnancy related deaths among women – named The Mother Child Health programme (MCH). Midwifes trained what we called Traditional Births Attendants. It was elderly women, very often illiterate that were given a 3 week intensive training course, that provided them with simple knowledge about ante and post natal services. For them use of clean water –water that has been boiled was something new. And it was not only a serious problem in Afghanistan. Today worldwide 1,2 billion have no access to clean water and 2,6 billion have no access to proper sanitation and it has serious consequences.

Based on this knowledge and my experience Professor Ole Brun Madsen from Aalborg University, Institute of Electronic Systems suggested that we together tried to develop programmes that could improve health awareness.

2 The United Nations Millennium Development Goals

- Achieve universal primary education
- Promote gender equality and empower women
- Reduce child mortality
- Improve maternal health
- Combat HIV/AIDS, malaria and other diseases
- Ensure environmental sustainability
- Develop a global partnership for development
- Eradicate extreme poverty and hunger.

3 Our Idea

Is targeting goal no.2 – Empowerment of women, and in particular no. 3, 4 and 5 ; reduce child mortality, improve maternal health and combat HIV/AIDS, malaria and other diseases.

The poor health situation not only in Afghanistan but also in other less developed countries is caused by a number of causes. Lack of safe and adequate water supply, poverty and dire living conditions, poor health awareness within the community caused by a combination of lack of knowledge, illiteracy, superstition and deep rooted traditions.

Based on the experiences from Afghanistan we think that in general in all less developed countries

- We have to reach out to where people live, to the small villages and communities, and aim at changing their practice through information given in a relaxed context.
- The information/education given must constantly be followed up by our indigenous co-workers that facilitate that the increased awareness also finds a way into daily practises – that in turn, turns into a habit.
- We are aware of that this could probably take years.

4 Health awareness is our goal

- Essential Health topics presented as computer programs using icons and speech recognition. Step by step drawings, and in the local language
- Developed in cooperation with national authorities e.g. Ministry of Health and professionals.
- Targeting in particular illiterate women
- Implementation of the programme on grass root level by the National Red Cross/Red Crescent Society´s local branches and its trained personnel either professionals or volunteers.
- The computers with its programmes are donated to the National Red Cross/Red Cross society but are given on loan to a village/community for a period of 3 months.

- Initial instructions and follow up will be given by the local Red Cross/Red Crescent branch's personnel.

5 Suggestions for the Health Care programs on grass root level

With the kind help from medical personnel the following list of programmes has been developed:

- Hand washing
- Antenatal care
- Birthing,
- Post natal care
- Care of toilets/latrines
- Infectious disease prevention
- Sewage
- Waste removal
- Breastfeeding
- Clean water
- Promoting nutrition in the home
- Condom promotion
- HIV/AIDS home care training
- Malaria. Home treatment of fevers
- Measles (Catch Up campaign)
- Insecticide Treated Mosquito Bed nets.

From the list it is clear that we are targeting elementary health issues and very common diseases and giving knowledge of health related topics and procedures that should be established.

6 Preliminary SWOT analysis of the programs

We do not claim that we have covered all corners in the SWOT analysis and would be grateful for comments. A few comments in particular on the *Strenghts* because this will tell more about the idea.

Strengths

The programme targets the community unit, the village and within this in particular women. It will require almost no previous knowledge or skills by the

user, and limited human resources when the distribution system is organised. It will be developed in close cooperation with the beneficiaries, a national Red Cross/Red Crescent Society to secure shared ownership and responsibility for the development and for the implementation of the programme. The programme can be used by a single person or by a group and it can be done when the person or the group have time and/or are motivated. We think that it, apart from the health topics will stimulate curiosity and in this way create a multiplier effect. Further programs can easily be added covering other subjects.
When the programme is developed and with a distribution structure in place the cost benefit rate would be high.

Weaknesses

The development costs will probably be high, and the program's effect will be dependent on support, understanding and motivation from all levels of the society in particular from political and religious leaders on top level. More specific it will be dependent on the national Red Cross/Red Crescents ability both to set up and maintain the administration and distribution system and its ability to recruit and train the volunteers and maintain and their enthusiasm. Apart from that there will be technical problems that have to be solved- e.g. power supply in areas without electricity- not to mention damage and theft of the computers. And finally; the time aspect. It will take time before we will see the effects – but when they come the news will spread fast – it will be like a snow ball. Will the national society than have the capacity to continue? Because when we create expectations we must be able to fulfil them otherwise it will fire back on the national society.

Threats	• Political/religious resistance/obstruction both from the top and local. • Resistance/obstruction from related professions in the health system. (Doctors, pharmacists) • Male resistance/obstruction • Computers stolen or damaged/destroyed. • Limited scientific merit from delivery of programs like this.

Strengths	Weaknesses	Opportunities
• Targeted on grass root level • User friendly for illiterate persons. Use Icons • Easy to understand. Simple, clear drawings. Step by step methodology. Clear words, simple sentences. • An indigenous administration and distribution system on grass root level. Shared ownership • Gender equality. Empowerment of women • Use when you have time. Alone or in groups. • Stimulate curiosity and wish for education/skills among all age groups. Multiplier effect • Limited use of human resources (Volunteers) • Programs covering other topics e.g. agriculture can easily be added. • The cost-benefit rate high when developed. • Can easily be transferred and used in other cultural settings	• Development costs probably high • Effect dependent on political, religious understanding and support • Effect dependent on the RC/RC ability to set up and maintain the administration and distribution system • Effect dependent on the way the program is presented to the beneficiaries. • Effect dependent on the RC/RC1 volunteers training and enthusiasm • Effect dependent on regularly follow up. • Effect dependent on the users motivation • Computers vulnerable to damage and theft. • Computers powered by batteries • Programs have to be adapted to a new cultural context. • Effect probably only visible in the long run	• Active and constant indigenous political and religious support from both the top and the local level. • Financial support for continuous development of new programs. • Indigenous demand for new programs to cover other aspects of the socio/economic context = multiplier effect. • Incentives to personnel • Income generating project • Upgrading to the internet.

Table 1 SWOT analysis

Opportunities and threats

Opportunities and threats are to a certain degree connected. If there is political and religious support and understanding on all levels it can go well – if not we better not start or have to be prepared for a long negotiation process. Further the financial framework for a considerable period has to be in place otherwise we can not fulfil expectations. In certain cultural contexts we can foresee resistance. It can come from related professions - doctors, pharmacists but also from the male population. But the major threat to the idea is that there is limited scientific merit from development and delivery of a programme like this, and willingness to when

developed to offer it free of charge to the beneficiaries. In short: there will be no business opportunities.

7 Preconditions for success.

- The beneficiary is part of the development at an early stage to guarantee shared ownership and transparency.
- A Memorandum of Understanding is signed between the donor and the beneficiary.
- The timeframe is fixed to no less than 5 years.
- The donor/s provides the financial support for the development of the programmes.
- The beneficiary implement the programme.
- A small pilot project to test and make the necessary corrections of the programmes and its implementation is carried out.
- A plan is established for the continuation/expansion of the programme at the same time as the midterm evaluation of the pilot programme to guarantee the programs sustainability.

8 How to continue?

Very many would ask: How come that this not has been done before? It is so simple and so obvious that someone must have done it before. Resources in general and in particular for this type of work are limited so it would be important that we not duplicated something that is already been done. That was also our reaction. So we started asking around. First my own organisation The International Federation of Red Cross and Red Crescent Societies and WHO . They had nothing like this. UNICEF and “One Child One Lap Top.” did not answer. Medicine sans Frontier had nothing but was very interested in being informed about our progress. Colleagues in the field have found it to be a great idea – but I know from many years working in the humanitarian field that there is a great competition and unfortunately also that they/we keep strategies and idea´s at lock and seal. So first of all we have to be sure that this not has been done before. Therefore we will be very thankful for any information about programmes or initiatives in this regard.

Several other tasks have to be done.
It was experiences from Afghanistan that triggered the idea. Unfortunately and for very many reasons the possibility to implement a programme like this in Afghanistan is out of the question.
But we think that there are very many countries that could be chosen and will be interested. We need to find a counterpart that find the idea interesting and challenging. We would like to set up a pilot project to test the idea in a smaller scale and have the opportunity to fine tune it and make the necessary corrections both in the programmes and in its implementation. We have already one country in mind that fulfils many of the preconditions for a success.
Essential would be to establish a group of highly motivated people with the necessary technical and medical knowledge needed to develop the programmes and overcome the technical problems that we can foresee. People that can see the challenges not only in the scientific and technical areas but also in the humanitarian area.
When we have an estimation of the costs, we come to the last challenge: to find a donor, a financial counterpart that can support the development and are full aware of that there will be no business opportunities.

9 Author Biographies

Leif Dierks, is born in 1941and got his master in history and sports 1969. He worked as a high school teacher 1969- 1993. In the period from 1993-2005 he worked in International Red Cross and was on missions in Former Yugoslavia 1993-94, in Bosnia 1996-97, in Afghanistan 1998-2001 and in Taiwan 2002-2005.

Ole Brun Madsen is born in 1942 in Denmark and received his M.Sc. in Mathematics & Computer Science from the University of Copenhagen. (1962-1972) researcher and from 1968 head of the Computer Science Laboratory at The Royal Danish Academy of Fine Arts in Copenhagen. (1972-1981) head of the Development Department, RECAU, the Regional Computing Centre at Århus

University. (1981-1996) Head of the Data Network Section and Head of the Network Infrastructure Strategy section at Jutland Telephone. (1996-1999) Manager for Infrastructure Network Technology and Strategy at TDC, Tele Denmark. (1999-) Professor in Distributed real-time Systems and from 2004 as Head of NetSec, Networking and Security section, CNP, Head of Center for Network Planning and Co-director for CTIF, Center for TeleInFrastructur at Aalborg University. He has been project leader for a number of national and international R&D projects and acted in high level advisory tasks within the European Commission on the R&D framework programmes in DGXIII and with United Nations UNDP activities. Present research is focused on Infrastructure Architecture and Modelling Tools for Network Analysis and Design.